=> d his

(FILE 'HOME' ENTERED AT 22:01:04 ON 03 JAN 2007)

FILE 'CAPLUS' ENTERED AT 22:01:35 ON 03 JAN 2007

E CASH MARY/AU 25

L1 5 S (E3 OR E4)

E COWAN PATRI*/AU 25

L2 11 S (E5 OR E6)

E KROON GIJSBERT/AU 25

L3 17 S (E3 OR E4)

L4 29 S L1 OR L2 OR L3

L5 20 S L4 AND ?CELLULOSE

NEWS X25 X.25 communication option no longer available

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 22:01:04 ON 03 JAN 2007

=> fil caplus

COST IN U.S. DOLLARS

FULL ESTIMATED COST

ODI IN O.S. DOBLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FILE 'CAPLUS! ENTERED AT 22:01:35 ON 03 JAN 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 3 Jan 2007 VOL 146 ISS 2 FILE LAST UPDATED: 2 Jan 2007 (20070102/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/infopolicy.html

=> E CASH MARY/AU 25

E	21	1	CASH	M M/AU
E	2	2	CASH	MARTIN G/AU
F	23	1>	CASH	MARY/AU
E	24	4	CASH	MARY JEAN/AU
E	25	1	CASH	MARY K/AU
E	: 6	1	CASH	MELANIE ·N/AU
E	27	1	CASH	MERLE/AU
E	18	1	CASH	MERVINA K M/AU
E	:9	3	CASH	MICHAEL/AU
E	10	1	CASH	MICHAEL J/AU
E	11	3	CASH	MICHAEL T/AU
E	:12	1	CASH	MICHELE/AU
E	13	1	CASH	MICHELE D/AU
E	14	1	CASH	MURRAY M/AU
E	15 1	L 3	CASH	P/AU
E	16	2	CASH	P E/AU .
E	17	2	CASH	P W/AU
E	18	4	CASH	PATRICIA/AU
E	19	2	CASH	PATRICIA W/AU

```
CASH PATRICIA WINTER/AU
E20
                 CASH PAUL T/AU
CASH PENNY/AU
CASH PENNY A/AU
CASH PETER ANTHONY/AU
E21
E24
E25
                                  CASH PHIL/AU
=> S (E3 OR E4)
                         1 "CASH MARY"/AU
                          4 "CASH MARY JEAN"/AU
                          5 ("CASH MARY"/AU OR "CASH MARY JEAN"/AU).
=> E COWAN PATRI*/AU 25
              1 COWAN PAMELA S/AU
E2
                        1
                                   COWAN PAT/AU
                COWAN PAT/AU

COWAN PATRIX*/AU

COWAN PATRICIA E/AU

COWAN PATRICK J/AU

COWAN PATRICK JOSEPH/AU

COWAN PATRICK M/AU

COWAN PATRICK M/AU

COWAN PATTY N/AU

COWAN PAUL ANTHONY/AU

COWAN PAUL L/AU

COWAN PAUL LLOYD/AU

COWAN PAUL LLOYD/AU

COWAN PAULINE/AU

COWAN PAULINE/AU

COWAN PETER/AU

COWAN PETER/AU

COWAN PETER A/AU

COWAN PETER J/AU

COWAN PETER J/AU

COWAN PETER JOHN/AU

COWAN PHILIP B/AU

COWAN PHILIP B/AU

COWAN PHILIP E/AU

COWAN PAULIP E/AU
                      0 --> COWAN PATRI*/AU
E3
E4
E5
E6
E7
E8
E9
E10
E11
E12
E13
E14
E15
E16
E17
E18
E19
E20
E21
E22
E23
E24
E25
=> S (E5 OR E6)
                         6 "COWAN PATRICK J"/AU
                         5 "COWAN PATRICK JOSEPH"/AU
L2
                        11 ("COWAN PATRICK J"/AU OR "COWAN PATRICK JOSEPH"/AU)
=> E KROON GIJSBERT/AU 25
                       12 · KROON GERARD J A/AU
                       4
E2
                                   KROON GERY/AU
               16 --> KROON GIJSBERT/AU

1 KROON GIJSBORT/AU

1 KROON H/AU

3 KROON H J J/AU

3 KROON H M/AU

4 KROON HARRY E/AU

1 KROON HENNIE/AU

1 KROON HENNIE J J/AU

1 KROON HERMAN M/AU

3 KROON HERMAN M/AU

5 KROON I/AU

2 KROON INGRID/AU

1 KROON INGRID/AU

1 KROON J A/AU

1 KROON J A/AU

1 KROON J B H/AU

4 KROON J C/AU
                       16 --> KROON GIJSBERT/AU
E3
E4
E5
E6
E7
E8
E9
E10
E11
E12
E13
E14
E15
E16
E17
E18
E19
```

Roy P. Issac Page 3

```
E20
                17
                         KROON J J/AU
E21
                28
                         KROON J M/AU
                         KROON J M W/AU
E22
                1
                         KROON J P C/AU
                5
E23
                         KROON J R/AU
E24
                 1
E25
                 1
                         KROON J RIA/AU
=> S (E3 OR E4)
                16 "KROON GIJSBERT"/AU
                 1 "KROON GIJSBORT"/AU
                17 ("KROON GIJSBERT"/AU OR "KROON GIJSBORT"/AU)
=> s l1 or l2 or l3
               29 L1 OR L2 OR L3
=> s 14 and ?cellulose
          393053 ?CELLULOSE
                20 L4 AND ?CELLULOSE
=> d 15 ibib abs 1-20
      ANSWER 1 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
                                 2006:1009958 CAPLUS
DOCUMENT NUMBER:
                                 145:355536
TITLE:
                                 Process of reducing fouling during heat processing of
                                 foods and beverages
INVENTOR(S):
                                 Cash, Mary Jean; Erazo-Majewicz, Paquita;
                                 Good, Richard M.
PATENT ASSIGNEE(S):
                                 Hercules Incorporated, USA
SOURCE:
                                 PCT Int. Appl., 31pp.
                                 CODEN: PIXXD2
DOCUMENT TYPE:
                                 Patent
LANGUAGE:
                                 English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
      PATENT NO.
                                                       APPLICATION NO.
                                KIND
                                          DATE
                                                                                       DATE
      -----
                                                          -----
                                 ----
                                          -----
           2006102051

A1 20060928 WO 2006-US9667 20060316
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
      WO 2006102051
                                 A1.
                                          20060928
                                                        WO 2006-US9667
                                                                                        20060316
                 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
                 KG, KZ, MD, RU, TJ, TM
                                          20061026
      US 2006240159
                                 A1
                                                         US 2006-377471
                                                                                        20060316
PRIORITY APPLN. INFO.:
                                                          US 2005-662704P
                                                                                  P 20050317
      A pasteurization or sterilization process reduces fouling of a food or
      beverage composition containing protein during the heat treatment. An antifouling
      agent for addition to the food or beverage composition is selected from
      hydroxypropylcellulose (HPC) with a hydroxypropyl molar
      substitution >3.0 and a weight average mol. weight (Mw) as measured by SEC of
      >350,000 Dalton, methylhydroxypropylcellulose (MHPC) with a
      methoxyl content >17% and a hydroxypropyl content >3%,
      methylcellulose (MC) with a methoxyl content >17% and a viscosity
      in water at ambient temps. and a concentration of 2% of >1,000 cps, or mixts.
      thereof. This food or beverage composition is then heated in a first heat
      exchanger at 50-100° for about 2 s to 30 min for pasteurization or
```

Roy P. Issac

it is further heated to sterilization temps. before being packaged out or further processed. The improvement of this process is that the heat exchangers are fouled $\geq 10\%$ by weight less (or the run-time is increased $\geq 10\%$) as compared to when heat-treating a similar food or beverage composition without the antifouling agent.

Deverage composition without the antifouring agent.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:945475 CAPLUS

DOCUMENT NUMBER: 145:316976

TITLE: Fabric softening compositions containing

hydrophobically and cationically modified

water-soluble polysaccharides

INVENTOR(S): Grainger, David Stephen; Griffiths, Llyr Glyndwr;

Hubbard, John Francis; Kroon, Gijsbert

PATENT ASSIGNEE(S): Unilever PLC, UK; Unilever N.V.; Hindustan Lever

Limited

SOURCE: PCT Int. Appl., 30pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

```
DATE
PATENT NO.
                         KIND DATE
                                                   APPLICATION NO.
                                                    _____, ____,
                                    -----
                           A1
                                   20060914 WO 2006-EP857
                                                                                   20060131
WO 2006094582 .
     W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
          CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
           SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
          VN, YU, ZA, ZM, ZW
     RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
           CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
          GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
           KG, KZ, MD, RU, TJ, TM
```

PRIORITY APPLN. INFO.:

GB 2005-4536 · A 20050304

An aqueous fabric softening composition having good high temperature stability comprises a cationic fabric softening compound and a water-soluble polysaccharide comprising hydrophobic groups selected from aryl, alkyl, alkenyl, aralkyl each having at least 14 carbon atoms and cationic quaternary ammonium salt groups such that the cationic degree of substitution is from 0.01 to 0.2, the polysaccharide having a mol. weight in the range from 100,000 to 700,000. Preferably, the hydrophobically modified water-soluble polysaccharide is quaternary ammonium salt-containing C16-C18-alkyl ether of 2-hydroxyethyl cellulose, and the cationic fabric softener is N,N-di(hydrogenated tallowoyloxyethyl)-N-hydroxyethyl-N-methylammonium Me sulfate.

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:944453 CAPLUS

DOCUMENT NUMBER: 145:316973

TITLE: Fabric softening compositions containing

hydrophobically modified water-soluble polysaccharides

INVENTOR(S): Grainger, David Stephen; Griffiths, Llyr Glyndwr;

Hubbard, John Francis; Kroon, Gijsbert

PATENT ASSIGNEE(S): Unilever PLC, UK; Unilever NV; Hindustan Lever Limited

SOURCE: PCT Int. Appl., 31pp.

CODEN: PIXXD2 ·

10/722,888>03/01/2007 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. . KIND DATE APPLICATION NO. DATE -------------------WO 2006094580 WO 2006-EP773 A1 20060914 20060125 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM PRIORITY APPLN. INFO.: GB 2005-4535 A 20050304 An aqueous fabric softening composition having good high temperature stability comprises a cationic fabric softener and a water-soluble polysaccharide comprising hydrophobic groups selected from aryl, alkyl, alkenyl, aralkyl, each having at least 14 carbon atoms, the polysaccharide comprising 1.0-2.5% of the hydrophobic groups and having a mol. weight in the range from 100,000 to 700,000. Preferably, the hydrophobically modified water-soluble polysaccharide is C16-C18-alkyl ether of 2-hydroxyethyl cellulose , and the cationic fabric softener is N, N-di(hydrogenated tallowoyloxyethyl)-N-hydroxyethyl-N-methylammonium Me sulfate. REFERENCE COUNT: THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT ANSWER 4 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:467925 CAPLUS DOCUMENT NUMBER: 141:25240 TITLE: Soluble, associative carboxymethyl cellulose , method for its manufacture and uses INVENTOR (S): Cash, Mary Jean; Cowan, Patrick J. ; Kroon, Gijsbert PATENT ASSIGNEE(S): Hercules Incorporated, USA SOURCE: PCT Int. Appl., 40 pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent English FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

LANGUAGE:

PATENT	NO.			KIN)	DATE			APPL	ICAT	ION 1	. 00		. D	ATE		
					-					-				·-			
WO 2004	0484	18		A2	:	2004	0610	1	WO 2	003-1	US38:	100		2	0031	126	
WO 2004	0484	18		A3		20040826											
₩:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
							DM,										
							IS,										
							MG,										
							SC,										
							VC,						-	•	•	•	
.RW:	BW,												ZM,	ZW,	AM,	AZ,	
							TM,										
							ΙE,										
																	TG
CA 2503	CA 2503507													NE, SN, TD, TG 20031126			
AU 2003298762															0031	126	

```
10/722,888>03/01/2007
                     A1 20040812 US 2003-722888
A2 20050824 EP 2003-796520
    US 2004158058
                                                                20031126
    EP 1565496
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     BR 2003016623 A 20051011 BR 2003-16623
                                                                 20031126
     CN 1717419
                         Α
                               20060104
                                         CN 2003-80104199
                                                                 20031126
     JP 2006514935
                                           JP 2004-555816
                        т
                              20060518
                                                                 20031126
PRIORITY APPLN. INFO.:
                                           US 2002-429291P P 20021126
WO 2003-US38100 W 20031126
                                           US 2002-429291P
    A water-soluble, associative CM-cellulose (CMC) exhibits unique and
AB
    highly desirable rheol. and performance properties in a wide variety
    end-use systems. The end-use systems include personal care, household
    care, paint, building material and construction, pharmaceutical, medical
    care, oilfield, mineral processing, paper making and paper coating, and
     food. A process for making the CMC comprises: (a) reacting in a slurry
    process, a source of cellulose, and .apprx.40-80% of the
    stoichiometric amount of NaOH for a sufficient time and at a sufficient
    temperature to form an alkali cellulose, and (b) adding to the alkali
    cellulose an amount of NaOH to bring the total amount of NaOH to about
    the stoichiometric level, and (c) immediately after step b, adding
    monochloroacetic acid to step b in a sufficient amount and reacting the
    slurry at a temperature and time sufficient to effect etherification in order to
     form the CMC product.
    ANSWER 5 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:676821 CAPLUS
DOCUMENT NUMBER:
                        135:212487
TITLE:
                        Stabilized cationic microfibrillar cellulose
INVENTOR(S):
                        Cash, Mary Jean; Chan, Anita Ngai; Conner,
                        Herbert Thompson; Cowan, Patrick Joseph;
                        Gelman, Robert Alan; Lusvardi, Kate Marritt; Thompson,
                        Samuel Anthony; Tise, Frank Peine
PATENT ASSIGNEE(S):
                        Hercules Incorporated, USA
                        PCT Int. Appl., 55 pp.
SOURCE:
                        CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
    PATENT NO. KIND DATE APPLICATION NO.
WO 2001066600 A1 20010913 WO 2001-US3458
                                           WO 2001-US3459
                                                                 20010201
```

```
WO 2001066600 A1 20010913 WO 2001-US3458 20010201
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA 2402181 A1 20010913 CA 2001-2402181 20010201
EP 1263792 A1 20021211 EP 2001-905373 20010201
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRIORITY APPLN. INFO::

US 2000-522032 A 20000309
WO 2001-US3458 W 20010201
AB Microfibrillar cellulose is derivatized to contain a substituent that provides cationic charge. The cationic microfibrillar cellulose to obtain a derivatized microfibrillar cellulose
```

, microfibrillizing a derivatized non-microfibrillar cellulose

to produce a derivatized microfibrillar cellulose, or

Roy P. Issac

microfibrillizing and derivatizing a non-microfibrillar cellulose substantially simultaneously. The derivatized microfibrillar cellulose is useful as a rheol. modifier and in coatings, paper, emulsions, dispersions, paper compns., comestible compns., non-comestible spreadable compns., and foams.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 6 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:628184 CAPLUS

DOCUMENT NUMBER: 133:224315

TITLE: Hydrophobically modified cellulose-based

associative thickeners for coatings having a high ICI

viscosity

INVENTOR(S): Hofman, Hans; Kroon, Gijsbert PATENT ASSIGNEE(S): Hercules Incorporated, USA SOURCE: PCT Int. Appl., 22 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

```
PATENT NO.
                             KIND
                                                  APPLICATION NO.
                                      DATE
                                                                               DATE
                                     -----
                             ----
                                                    -----
     WO 2000052059
                              A1
                                      20000908 WO 2000-US5646
                                                                               20000302
          W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GD, GE,
          GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, BF, BJ, CF, CG, CI,
               CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     EP 1035134
                                                                               19990305
                              A1
                                      20000913
                                                    EP 1999-103926
     EP 1035134
                                      20050608
                              B1
              AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
               IE, SI, LT, LV, FI, RO
                                                    ES 1999-103926
     ES 2241200
                                      20051016
                              T3
                                                                                19990305
     CA 2362287
                                                    CA 2000-2362287
                              A1
                                      20000908
                                                                                20000302
     BR 2000008777
                              Α
                                      20011218
                                                    BR 2000-8777
                                                                                20000302
     JP 2003530441
                              T
                                                    JP 2000-602282
                                      20031014
                                                                                20000302
     TW 546304
                                                    TW 2000-89111439
                              В
                                      20030811
                                                                                20000612
                                                                            A 19990305
W 20000302
PRIORITY APPLN. INFO.:
                                                    EP 1999-103926
                                                    WO 2000-US5646
```

AB Hydrophobically modified hydroxyethyl cellulose, methylhydroxyethyl cellulose or ethylhydroxyethyl cellulose have the mol. weight and the kind and amount of hydrophobe substitution selected such that the C10-20 alkyl-modified cellulose derivs. (alkyl substitution 0.3-6.0 weight%) give aqueous coatings a Leneta leveling ≥9 and improved ICI viscosity at low concentration Thus, a semigloss paint comprising water 95.7, propylene glycol 21.5, aminopropanol 2, Calgon N 9, Byk 154 anionic dispersant 2, defoamer 5, C16-alkyl modified hydroxyethyl cellulose (hydroxyethyl MS 4.17, cellulose backbone mol. weight 21,000, 0.89 weight% C16) 0.87, TiO2 190, CaCO3 90, Surfynol 104E 6, Neocryl XK 90, Dehydran 1293 9, and diethylene glycol 60.7 parts with ammonia to pH 9 showed Stormer viscosity 100 KU, ICI viscosity 130, and Leneta leveling 10.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 7 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:573840 CAPLUS

DOCUMENT NUMBER: 133:179157

TITLE: Derivatized microfibrillar polysaccharides, their

formation and use in dispersions

INVENTOR(S): Cash, Mary Jean; Chan, Anita N.; Conner,

Herbert Thompson; Cowan, Patrick Joseph;

Gelman, Robert Alan; Lusvardi, Kate Marritt; Thompson,

Samuel Anthony; Tise, Frank Peine

PATENT ASSIGNEE(S): Hercules Incorporated, USA

PCT Int. Appl., 84 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

```
PATENT NO.
                           KIND DATE
                                              APPLICATION NO.
                                                                         DATE
                           ____
                                   -----
                                                -----
                                                                          -----
     WO 2000047628
                            A2
                                   20000817
                                              WO 2000-US3319
                                                                         20000208
     WO 2000047628
                           A3
                                   20001207
          W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
              DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
              TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW
          RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
              DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     US 6602994
                                              US 1999-248246
                                   20030805
                            B1
                                                                          19990210
     CA 2327482
                            Α1
                                   20000817
                                                CA 2000-2327482
                                                                          20000208
     BR 2000005116
                            Α
                                   20010102
                                                BR 2000-5116
                                                                          20000208
     EP 1078008
                            A2
                                   20010228
                                                EP 2000-911740
                                                                          20000208
              AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO
     HU 200102765
                            A2
                                   20011228
                                                HU 2001-2765
                                                                          20000208
     TR 200002813
                            T1
                                   20020621
                                                TR 2000-2813
                                                                         20000208
     JP 2002536507
                            Т
                                   20021029
                                                JP 2000-598543
                                                                         20000208
     NZ 507250
                            Α
                                   20030829
                                                NZ 2000-507250
                                                                         20000208
     NO 2000005085
                            Α
                                   20001207
                                                NO 2000-5085
                                                                          20001009
PRIORITY APPLN. INFO.:
                                                US 1999-248246
                                                                      A 19990210
                                                WO 2000-US3319
                                                                     W 20000208
AB
```

The invention is directed to the following. A method for producing derivatized microfibrillar polysaccharide, including but not limited to cellulose, derivatized by steric and/or electrostatic forces, where the electrostatic forces are provided by anionic charge or by a combination of both anionic and cationic charge, by stabilizing and/or microfibrillating a polysaccharide starting material. A method of modifying the rheol. properties of a composition of matter using derivatized microfibrillar polysaccharide. Method of improving coatings, paper manufacture, and the stability of emulsions, dispersions, and foams using a derivatized microfibrillar polysaccharide. Compns. that include derivatized microfibrillar polysaccharide, e.g., CM cellulose, including paper compns., comestible compns., non-comestible spreadable compns. (cosmetics), and emulsions, dispersion, and foams.

```
ANSWER 8 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN
```

ACCESSION NUMBER:

2000:290672 CAPLUS

DOCUMENT NUMBER:

132:309759

TITLE:

Combinations of associative thickeners and aqueous

protective coating compositions Kroon, Gijsbert; Sau, Arjun C.

INVENTOR(S): PATENT ASSIGNEE(S):

Hercules Incorporated, USA

SOURCE: Eur. Pat. Appl., 12 pp. CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

```
PATENT NO.
                   KIND DATE APPLICATION NO. DATE
     EP 997502 Al 20000503 EP 1998-120191 19981030
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO
     CA 2347839
                               20000511
                                           A1
                                                                 19991029
                               20000511
     WO 2000026291
                         A1
                                                                19991029
         W: AE, AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU,
             ZA, ZW
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, BF, BJ, CF, CG, CI,
             CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                 A 20010710 BR 1999-14951 .
A2 20020328 HU 2001-4104
2 T 20030715 JP 2000-579673
5 A 20010426 NO 2001-2055
NFO.: EP 1998-120191
     BR 9914951
     HU 200104104
                                                                 19991029
     JP 2003521562
                                                                 19991029
     NO 2001002055
                                                                 20010426
                                           EP 1998-120191 A 19981030 WO 1999-US25624 W 19991029
PRIORITY APPLN. INFO.:
AB
     Thickener compns. comprise a combination of associative thickeners,
     wherein at least one associative thickener is a hydrophobically modified
     cellulose derivative or a hydrophobically modified guar derivative and is
     present in the combination of associative thickeners in a relative amount of
     at least 70% by weight or in a relative amount of not more than 30% by weight,
    based on the weight of the combination of associative thickeners. A
     thickener composition contained hydrophobically modified hydroxyethyl
     cellulose and hydrophobically modified polyethylene glycol.
REFERENCE COUNT:
                              THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
                              RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
    ANSWER 9 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:116797 CAPLUS
DOCUMENT NUMBER:
                        132:138864
                        Preparation and application of industrial protective
TITLE:
                        aqueous coating compositions containing an associative
                        thickener
INVENTOR(S):
                        Kroon, Gijsbert
PATENT ASSIGNEE(S):
                        Hercules Incorporated, USA
SOURCE:
                        Eur. Pat. Appl., 37 pp.
                        CODEN: EPXXDW
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
    PATENT NO. KIND DATE APPLICATION NO. DATE
                        ----
    EP 979850 A1 . 20000216 EP 1998-115111 EP 979850 B1 20040519
                                                                19980811
    EP 979850
                        B1 20040519
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO
    AT 267231
                        T 20040615 AT 1998-115111
                                                                 19980811
    ES 2217467
                         Т3
                            20041101
20000224
20000224
                               20041101 ES 1998-115111
                   ד3
A1
רא
    CA 2338621
                               20000224 CA 1999-2338621 19990811
20000224 WO 1999-US18385 19990811
    WO 2000009564
                        A1
        W: AE, AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GD,
            GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
```

LK, LR, LS, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU,

RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, BF, BJ, CF, CG, CI, CM,

GA, GN, GW, ML, MR, NE, SN, TD, TG

Roy P. Issac

```
AU 9954819
                        A1
                              20000306
                                         AU 1999-54819
                                                               19990811
    AU 761716
                        B2
                              20030605
                              20010508
    BR 9912961
                        Α
                                         BR 1999-12961
                                                               19990811
    TR 200100115
                        T2
                              20010621
                                         TR 2001-200100115
                                                               19990811
    HU 200103131
                        A2
                              20011128
                                         HU 2001-3131
                                                               19990811
    JP 2003522212
                        T
                              20030722
                                         JP 2000-565010
                                                               19990811
    NO 2001000692
                        Α
                              20010209
                                         NO 2001-692
                                                               20010209
PRIORITY APPLN. INFO.:
                                         EP 1998-115111
                                                            A 19980811
                                         WO 1999-US18385
                                                            W 19990811
```

AB The associative thickener is not a polyurethane thickener and is selected so that its concentration required by the specific application method is below the critical concentration, defined as the thickener concentration at which the coils of the thickener polymer start to overlap or entangle calculated according to the Mark-Houwink equation. Cetyl-modified hydroxyethyl cellulose thickener with viscosity average mol. weight 60,000 and at concentration 1.07% in a styrene-acrylic anticorrosion primer was sprayed onto a substrate to give a smooth film having good slat spray resistance and no blistering.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 10 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2000:98676 CAPLUS

DOCUMENT NUMBER:

132:138852

TITLE:

Waterborne coatings and paints comprising cationically

modified associative cellulose ethers having

one hydrophobic group and one quaternary ammonium salt

group

INVENTOR (S):

Kroon, Gijsbert

PATENT ASSIGNEE(S): SOURCE:

Hercules Incorporated, USA

PCT Int. Appl., 19 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA'	PATENT NO.				KIN	D	DATE			APPI	LICAT	ION I	NO.		D	ATE.	
WO	2000	0066	56		A 1		2000	0210		WO 1	1999-1	US11	728		19990525		
											BR,						
		DE,	DK,	EE,	ES,	FI,	GB,	GD,	GE,	GH.	GM,	HR.	HU.	ID.	IL.	IN.	IS.
											LS,						
		MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG.	SI.	SK.	SL.	TJ.
							UZ,					•	,	,		,	,
	RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SL,	SZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,	DK,
		ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,
		CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG	-	•			·
US	6121	439			Α		2000	0919	•	US 1	998-	1286	32		1	9980	727
	2338				A1		2000	0210		CA 1	999-2	2338	380		1	9990	525
	9942				A1		2000	0221		AU 1	999-4	4211:	2		1	9990	
	7479																
BR	9912	477			Α		2001	0417	:	BR 1	.999-:	1247	7		1	9990	525
EP	1100	851			A1		2001	0523		EP 1	999-9	92592	24		1	9990	525
EP	1100																
	R:			CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙT,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,									•						
	2001						2001				001-2					9990!	525
	2001						2001				001-2					9990!	
	2002						20020				000-5						
	2720						2004				999-9						
ES	2224	670									.999-9						
	59360		- ^				20040			rw 1	.999-8	38112	2610		1	9990	928
	2001				Α		2001	3307			001-4						
PRIORITY	APP	. ۱۷۰	INFO.	. :					τ	JS 1	.998-1	L2863	32		A 1	9980'	727

```
WO 1999-US11728
                                                                W 19990525
AB
     A coating composition comprises a water soluble polysaccharide composition comprising
     at least one hydrophobic group selected from aryl, alkyl, alkenyl, aralkyl
     and mixts. thereof and at least one quaternary ammonium salt group, both
     connected to a polysaccharide backbone by covalent bonds. The coating
     composition also comprises a synthetic thickener such as hydrophobically
     modified polyethylene oxide, associative acrylic polymer, and
     hydrophobically modified ethoxylated urethane. The water-soluble
     polysaccharides are prepared by (1) preparing slurry of the associative
     thickener such as hydroxyethyl cellulose in presence of water
     and caustic, (2) reacting with glycidyl trimethylammonium chloride at
     45° for about 4 h under a nitrogen blanket, and (3) cooling,
     neutralizing, precipitating, filtering, and drying. This coating is used for
     improving the leveling of waterborne paints.
REFERENCE COUNT:
                               THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 11 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
                         1998:653744 CAPLUS
DOCUMENT NUMBER:
                         129:261808
TITLE:
                         Use of aqueous protective coating compositions for
                         industrial coatings and aqueous coating compositions
                         containing an associative thickener
                         Kroon, Gijsbert
INVENTOR(S):
PATENT ASSIGNEE(S):
                         HERCULES INCORPORATED, USA
SOURCE:
                         Eur. Pat. Appl., 15 pp.
                         CODEN: EPXXDW
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                         KIND
                                          APPLICATION NO.
                               DATE
                                                                 DATE
                         ----
                                -----
                                         EP 1997-105214
     EP 867481
                         A1
                                19980930
                                                                  19970327
                              · 20030507
     EP 867481
                         В1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
     ES 2193291
                          T3
                                           ES 1997-105214
                                20031101
                                                                  19970327
     CA 2233145
                         A1
                                19980927
                                           CA 1998-2233145
                                                                  19980326
     ZA 9802617
                                19980928
                                            ZA 1998-2617
                         A
                                                                   19980327
                                         AU 1998-59700
     AU 9859700
                         Α
                                19981001
                                                                   19980327
     AU 738968
                       · B2
                                20011004
                       A
A
                                         CN 1998-100971
JP 1998-81204
     CN 1195008
                                19981007
                         A 19981007
A 19990202
A 19990713
A 19991005
                                                                  19980327
     JP 11029721
                                                                 19980327
                                                                19980327
                         Α
     US 5922119
                                           US 1998-49536
     BR 9801137
                                           BR 1998-1137
                                                                  19980327
PRIORITY APPLN. INFO.:
                                           EP 1997-105214
                                                               A 19970327
     The associative thickener is not a polyurethane thickener and is selected
     so that its concentration required by the specific application method is below
     the critical concentration, defined as the thickener concentration at which the coils of
     the thickener polymer start to overlap or entangle calculated according to the
     Mark-Houwink equation. Cetyl-modified hydroxyethyl cellulose
     thickener with viscosity average mol. weight 60,000 and at concentration 1.07% in a
     styrene-acrylic anticorrosion primer was sprayed onto a substrate to give
     a smooth film having good slat spray resistance and no blistering.
REFERENCE COUNT:
                               THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
    ANSWER 12 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
                        1998:564209 CAPLUS
DOCUMENT NUMBER:
                         129:176977
TITLE:
                         Cellulose ethers in emulsion polymerization
```

dispersions

INVENTOR (S): Janssen, Bernardus J. W.; Kroon, Gijsbert;

Kruythoff, Dirk; Salomons, Willemina G.

PATENT ASSIGNEE(S): Hercules Inc., USA

SOURCE: U.S., 14 pp., Cont.-in-part of U.S. Ser. No. 542,269,

abandoned. CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5795928	Α	19980818	US 1995-553007.	19951103
CA 2204242	A1	19960517	CA 1995-2204242	19951103
HU 77335	A2	19980330	HU 1997-2282	19951103
HU 218013	В	20000528		
ES 2214509	T3	20040916	ES 1995-938712	19951103
EG 21224	A	20010228	EG 1996-136	19960218
TW 473480	В	20020121	TW 1996-85103283	19960319
PRIORITY APPLN. INFO.:			US 1994-333697	B1 19941103
			US 1995-542269	B2 19951020
•	÷		US 1995-553007	A 19951103

AB In a process for preparing a latex system that has a tendency to flocculate because of grafting, the improvement comprises aqueous emulsion polymerizing of \geq 1 unsatd. monomer (e.g., acrylic acid, methacrylic acid, Bu \cdot acrylate, Me methacrylate, acrylic esters, styrene, vinyl ethers, vinyl, vinylidene halides, N-vinyl pyrrolidone, ethylene, C3 or greater alpha-olefins, allyl amines, allyl esters of saturated monocarboxylic acids and amides thereof, propylene, 1-butene, 1-pentene, 1-hexene, 1-decene, allyl amines, allyl acetate, allyl propionate, allyl lactate and derivs.) in the presence of a water-soluble protective colloid. The protective colloid has a weight-average mol. weight <75,000, and is selected from CMcellulose and derivs. having a carboxyl degree of substitution lower limit of about 0.7, hydroxyethylcellulose, Et hydroxyethylcellulose, methylcellulose, Me hydroxypropylcellulose, hydroxypropylcellulose, poly(acrylic acid) and alkali metal salts thereof, ethoxylated starch derivs., sodium and other alkali metal polyacrylates, water soluble starch glue, gelatin, water soluble alginates, casein, agar, natural and synthetic gums, partially and fully hydrolyzed poly(vinyl alc.), polyacrylamide, poly(vinyl pyrrolidone), poly(Me vinyl ether-maleic anhydride), gelatin, and casein. The latex has improved mech. and shear stability. This latex provides coating manufacturers the flexibility of either eliminating surfactants altogether from coating or to use small amts. thereof.

REFERENCE COUNT: 81 THERE ARE 81 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 13 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1996:443976 CAPLUS

DOCUMENT NUMBER: 125:88102

TITLE: Emulsion polymerization of ethylenically unsaturated

monomers in the presence of protective colloids,

especially cellulose ethers, giving latexes

with improved mechanical stability

INVENTOR (S): Janssen, Bernardus J. W.; Kroon, Gijsbert;

Kruythoff, Dirk; Salomons, Willemina G.

Hercules Inc., USA

PATENT ASSIGNEE(S): SOURCE: PCT Int. Appl., 47 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

```
PATENT NO.
                      KIND DATE APPLICATION NO.
                                                            -----
    -----
                      ----
                                        -----
                       A1 19960517 WO 1995-US12757
    WO 9614357
                                                            19951103
        W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI,
            GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD,
            MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ,
            TM, TT
        RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE,
            IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR,
            NE, SN, TD, TG
    CA 2204242
                             19960517
                                        CA 1995-2204242
                                                              19951103
                       A1
    AU 9539985
                       Α
                             19960531
                                        AU 1995-39985
                                                              19951103
    AU 705681
                       B2
                             19990527
    EP 789725
                       Α1
                             19970820
                                        EP 1995-938712
                                                              19951103
    EP 789725
                       B1
                             20040324
        R: AT, BE, CH, DE, ES, FR, GB, LI, NL, PT, SE
    BR 9509581
                            19971223
                                      BR 1995-9581
                       Α
                                                              19951103
    HU 77335
                       A2
                             19980330
                                        HU 1997-2282
                                                              19951103
    HU 218013
                       В
                             20000528
    JP 10508632
                       Т
                             19980825
                                        JP 1995-515301
                                                              19951103
    RU 2156775
                       C2
                                        RU 1997-109350
                             20000927
                                                              19951103
    AT 262557
                       Т
                                        AT 1995-938712
                             20040415
                                                             19951103
    ES 2214509
                      Т3
                                        ES 1995-938712
                             20040916
                                                             19951103
                     B2
A
    JP 3667341
                             20050706
                                        JP 1996-515301
                                                              19951103
    EG 21224
                                        EG 1996-136
                             20010228
                                                              19960218
    NO 9702015
                       Α
                             19970623
                                        NO 1997-2015
                                                              19970430
                                                         A 19941103
PRIORITY APPLN. INFO.:
                                        US 1994-333697
                                                          A 19951020
                                        US 1995-542269
                                                           A 19951103
                                        US 1995-533007
                                                             19951103
                                        WO 1995-US12757
                                                          W
```

AΒ Polymer latexes having improved mech. and shear stability are prepared by emulsion polymerization of at least one ethylenically unsatd. monomer having up to 23 carbons in the presence of a surfactant, a protective colloid with a mol. weight of less than 75,000 (in an amount of .apprx.0.05-5.0% based on the monomer content), and at least one water-soluble free-radical polymerization initiator (in an amount of .apprx.0.01-1.5% based on the monomer content.). The protective colloids are selected from the group consisting of cellulose ethers (CMC, hydroxyethyl cellulose, Et hydroxyethyl cellulose, Me cellulose, Me hydroxypropyl cellulose, hydroxypropyl cellulose) or their derivs., poly(acrylic acid) and their alkali metal salts, ethoxylated starch derivs., water-soluble starch, gelatin, alginates, casein, agar, natural and synthetic gums, partially or fully hydrolyzed poly(vinyl alc.), polyacrylamide, poly(vinyl pyrrolidone), or maleic anhydride-Me vinyl ether copolymer. This latex provides coating manufacturers the flexibility of either eliminating surfactants altogether from coating or to use small amts. thereof. Thus, 16.6 g CM-cellulose (mol. weight 7,000-11,000, substitution degree .apprx. 1.2) together with 1.6 g NaHCO3 were dissolved in 461 g demineralized water, the temperature was raised to 85°, 1.5 g K2S2O8 initiator in 50 g water was added, followed by addition of the monomer mixture containing 248.6 g Bu acrylate, 248.6 g Me methacrylate, and 2.8 g methacrylic acid. After several hours a fine dispersion of the polymeric latex was obtained. Due to the small size of the obtained latex particles, they may be employed in latex paint compns. with high pigment content without the need to add surfactants to the paint.

```
L5 ANSWER 14 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN
```

ACCESSION NUMBER: 1996:388148 CAPLUS

DOCUMENT NUMBER: 125:35939

TITLE: Waterborne clay-containing emulsion paints with

improved application performance

INVENTOR(S): Kroon, Gijsbert

PATENT ASSIGNEE(S): Aqualon Company, USA

SOURCE: Eur. Pat. Appl., 11 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATI	ENT NO.		KIND	DATE	APPLICATION NO.	DATE	
	-		-				-
EP '	707052		A2	19960417	EP 1995-116040	1995101	1
Eb .	707052		A3	19980805			
EP '	707052		B1	20010816			
	R: BE,	CH, I	DE, FR,	GB, IT, LI,	NL, PT, SE		
US!	5574081		Α	19961112	US 1994-324189	1994101	1
CA :	2160191		A1	19960412	CA 1995-2160191	1995101	.0
AU !	9533162		Α	19960426	AU 1995-33162	1995101	.0
AU '	701931		B2	19990211		•	
JP (08199110		A	19960806	JP 1995-263167	1995101	1
CN :	1132228		Α	19961002	CN 1995-119930	1995101	1
CN :	1086723		В	20020626			
PT T	707052		${f T}$	20020228	PT 1995-116040	1995101	1
PRIORITY	APPLN.	INFO.:	;		US 1994-324189	A 1994101	1

The title paint compns. comprise a clay-containing pigment system, a latex AB binder, a polysaccharide (e.g., hydroxyethyl cellulose) thickener, and 0.005-2%, based upon the weight of the pigment, of a blocking agent [e.g., poly(ethylene glycol)] which serves to prevent more than 20% of the polysaccharide thickener from being adsorbed onto the clay pigment surface, whereby the paint composition exhibits improved appearance and application performance.

ANSWER 15 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1995:879560 CAPLUS

DOCUMENT NUMBER: 124:10964

TITLE: Formulating waterborne gloss emulsion paints with

cellulose ether-based associative thickeners

Kroon, Gijsbert AUTHOR (S):

CORPORATE SOURCE: Aqualon Division, Zwijndrecht, 3336 LH, Neth. SOURCE: Coatings, Community and Care, International

Conference, 14th Copenhagen, Nov. 14-16, 1994 (1994),

1-12. Paint Research Association: Teddington, UK.

CODEN: 61VZAP

DOCUMENT TYPE: Conference LANGUAGE: English

Low-mol. weight hydrophobically modified hydroxyethyl cellulose is an associative thickener providing gloss and semi-gloss emulsion paints with a good balance of paint properties.

ANSWER 16 OF 20 CAPLUS . COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1994:607684 CAPLUS

DOCUMENT NUMBER: 121:207684

TITLE: Associative behavior of hydrophobically modified

hydroxyethyl celluloses (HMHECs) in waterborne

coatings

AUTHOR (S): Kroon, Gijsbert

Aqualon BV, Zwijndrecht, 3336 LH, Neth. CORPORATE SOURCE:

SOURCE: Progress in Organic Coatings (1993), 22(1-4), 245-60

CODEN: POGCAT; ISSN: 0033-0655

DOCUMENT TYPE: Journal LANGUAGE: English

AB The associative behavior of hydrophobically modified hydroxyethyl cellulose (HMHEC) in polymer dispersions has been determined as a function of the composition of both the associative thickener (AT) and the latex. The impact of latex composition and HMMEC composition on the adsorption

characteristics and rheol. properties of the latex-thickener system were demonstrated. Adsorption of HMHECs onto an acrylic emulsion strongly depends on the hydrophobe type and degree of substitution, as well as on the mol. weight of the associative thickener. The degree of latex adsorption is influenced dramatically by the stabilization system utilized, that is choice and level of surfactant and carboxylic acid content, in addition to the composition of the monomer mix. Rheol. measurements demonstrate that HMHECs of specific composition can provide gloss emulsion paints with a balance of rheol. properties, combining excellent leveling with sag resistance.

ANSWER 17 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1994:137216 CAPLUS

DOCUMENT NUMBER:

120:137216

TITLE:

Improved leveling of aqueous coating compositions by addition of associative thickeners of modified natural

and synthetic polymers

INVENTOR(S):

Kroon, Gijsbert; Sau, Arjun Chandra

PATENT ASSIGNEE(S):

Aqualon Co., USA

SOURCE:

Eur. Pat. Appl., 12 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 566911	A1	19931027	EP 1993-105486	19930402
EP 566911	B1	19980826		
R: AT, BE, CH,	DE, DK	, ES, FR, C	GB, GR, IE, IT, LI, LU,	NL, PT, SE
AT 170207	T	19980915	AT 1993-105486	19930402
ES 2119828	T3	19981016	ES 1993-105486	19930402
CA 2093493	A1	19931021	CA 1993-2093493	19930406
CA 2093493	C	20041019		
JP 06025569	Α	19940201	JP 1993-93279	19930420
JP 3696258	B2	20050914		
PRIORITY APPLN. INFO.:			US 1992-871320	A 19920420

Polysaccharide (hydroxyethylcellulose) and synthetic polymers [poly(vinyl alc.)] are modified with alkyl or aralkyl hydrophobic groups; these polymers having mol. weight 10,000-300,000 and 10,000-50,000 (preferred), resp., improve leveling without affecting sag or thickening efficiency. High mol. weight hydrophobically-modified polysaccharide can be degraded with H2O2 to reduce the mol. weight to a useful range.

ANSWER 18 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1994:79487 CAPLUS

DOCUMENT NUMBER:

120:79487

TITLE:

Associative behavior of hydrophobically modified

hydroxyethyl celluloses (HMHECs) in waterborne

coatings

AUTHOR (S):

Kroon, Gijsbert

CORPORATE SOURCE:

Aqualon BV, Zwijndrecht, 3336 LH, Neth.

SOURCE:

Proc. - Int. Conf. Org. Coat. Sci. Technol., 18th (1992), 283-95. Int. Conf. Org. Coag. Sci. Technol.:

New Paltz, N. Y. . CODEN: 59BGAF Conference

DOCUMENT TYPE:

LANGUAGE: English

The associative behavior of hydrophobically modified hydroxyethyl cellulose in polymer dispersions was determined as a function of the composition of both the associative thickener (AT) and the latex. How changes in interaction between HMHEC and the latex influence the rheol. of the latex-thickener systems is discussed. Adsorption of HMHECs onto an acrylic emission strongly depends on the hydrophobe type and degree of

substitution, as well as on the mol. weight of the associative thickener. The degree of latex adsorption is influenced dramatically by the stabilization system utilized, i.e., choice and level of surfactant and carboxylic acid content, in addition to the composition of the monomer mix. Rheol. measurements demonstrated that HMHECs of specific composition can provide gloss emulsion paints with a balance of rheol. properties, combining excellent leveling with sag resistance.

ANSWER 19 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1992:592563 CAPLUS

DOCUMENT NUMBER:

117:192563

TITLE:

Particle size control in vinyl polymerization.

INVENTOR(S): PATENT ASSIGNEE(S): Kroon, Gijsbert Aqualon Co., USA

SOURCE:

Eur. Pat. Appl., 8 pp. CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	.DATE
EP 489425	A1	19920610	EP 1991-120846	19911204
EP 489425	B1	19960904	•	
R: AT, BE, CH,	DE, FR	, GB, IT, L	I, NL, SE	
CA 2053631	A1	19920607	CA 1991-2053631	19911017
AT 142231	T	19960915	AT 1991-120846	19911204
AU 9188881	Α	19920611	AU 1991-88881	19911205
AU 653559	B2	19941006		
JP 04275305	Α	19920930	JP 1991-323212	19911206
JP 3326191	B2	20020917		
PRIORITY APPLN. INFO.:			US 1990-622959	A 19901206

Particle size distribution (PSD) of polymers prepared from styrene, Me AB methacrylate, vinyl chloride, diethylaminoethyl methacrylate and Bu methacrylate has a homogeneity of ≥60% and weight% latex is ≤0.1 weight% [based on weight% monomer(s)] when prepared in presence of a thickener from specified cellulose ethers and Ca3(PO4)2. Thus, an emulsion polystyrene was prepared in presence of 0.4-0.6 weight% hexadecyl hydroxymethyl cellulose (molar substitution 1.5-4.1) and 0.25 weight% Ca3(PO4)2 to give homogeneity of PSD 75%.

ANSWER 20 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1991:146819 CAPLUS

DOCUMENT NUMBER:

114:146819

TITLE:

SOURCE:

Hydrophobically-modified cellulose ethers

for stable aqueous coal slurries Kroon, Gijsbort

INVENTOR(S): PATENT ASSIGNEE(S):

Aqualon Co., USA Ger. Offen., 4 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

Patent German

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3927567	A1	19910228	DE 1989-3927567	19890821
DE 3927567	C2	19980702		
TARTER				

PRIORITY APPLN. INFO.: DE 1989-3927567 19890821 Hydrophobically-modified cellulose ethers, which are substituted

with hydrophobic groups having C>6 alkyl, alkoxycarbonyl,

alkyliminocarbonyl, 3-alkoxy-2-hydroxypropyl and 2-alkyl-2-hydroxyalkyl

groups, are used as stabilizers for slurrying coal in water. Suitable cellulose ethers are cetyl and 3-n-butoxy-2-hydroxypropyl group-substituted hydroxyethylcellulose.

=> d his

(FILE 'HOME' ENTERED AT 22:01:04 ON 03 JAN 2007)

FILE 'CAPLUS' ENTERED AT 22:01:35 ON 03 JAN 2007

E CASH MARY/AU 25

L1 5 S (E3 OR E4)

E COWAN PATRI*/AU 25

L2 11 S (E5 OR E6)

E KROON GIJSBERT/AU 25

L3 17 S (E3 OR E4)

L4 29 S L1 OR L2 OR L3

L5 20 S L4 AND ?CELLULOSE

=> logoff

ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF

LOGOFF? (Y)/N/HOLD:y

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 72.08 72.29

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)
SINCE FILE TOTAL
ENTRY SESSION
CA SUBSCRIBER PRICE
-15.60
-15.60

STN INTERNATIONAL LOGOFF AT 22:03:38 ON 03 JAN 2007